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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,335	10/17/2003	James M. Booe JR.	3282-72278	2293
23643	7590	02/15/2005		
BARNES & THORNBURG 11 SOUTH MERIDIAN INDIANAPOLIS, IN 46204			EXAMINER EDGAR, RICHARD A	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688,335

Applicant(s)

BOOE, JAMES M.

Examiner

Richard Edgar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003 under 37 CFR 1.53(b).
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-11, 16-18 and 20 is/are allowed.
6) ☒ Claim(s) 12-15 and 19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/16/2004.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 8 is objected to because of the following informalities:

In claim 8, line 1, "an" should be -- a --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12, 15 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent Application Publication US 2003/0021691 A1 (Powers hereinafter).

Powers discloses an assembly for connecting a propeller to a drive axle, the assembly comprising a drive member 8 configured to mount on the drive axle 24, the drive member having an axis and including a plurality of radially outwardly extending ribs 13, a tubular member 2 coupled to the propeller, the tubular member having an axis

and a plurality of radially inwardly extending ribs 6, and a plurality of resilient members 17-19, each resilient member being positioned between one of the plurality of radially outwardly extending ribs 13 and one of the plurality of radially inwardly extending ribs 6, the resilient members 17-19 each having a planar contact surface and a planar counter-drive surface (see paragraph 0026, the sentence bridging pages 3 and 4). Each of the plurality of resilient members 17-19 has a longitudinal axis in parallel alignment with the drive member axis (see Fig. 5).

Powers, also teaches an assembly for connecting a propeller to a drive axle, the assembly comprising a drive member 8 configured to mount on the drive axle 24, the drive member having an axis and including a plurality of radially outwardly extending ribs 13, an insert 2 having a plurality of sides 2a, the insert being configured to mate with an inner hub of the propeller 20, the insert having an axis and a plurality of radially inwardly extending ribs 6, and a plurality of resilient members 17-19, each resilient member extending between one of the plurality of radially outwardly extending ribs 13 and one of the plurality of radially inwardly extending ribs 6.

Claim Rejections - 35 USC § 103

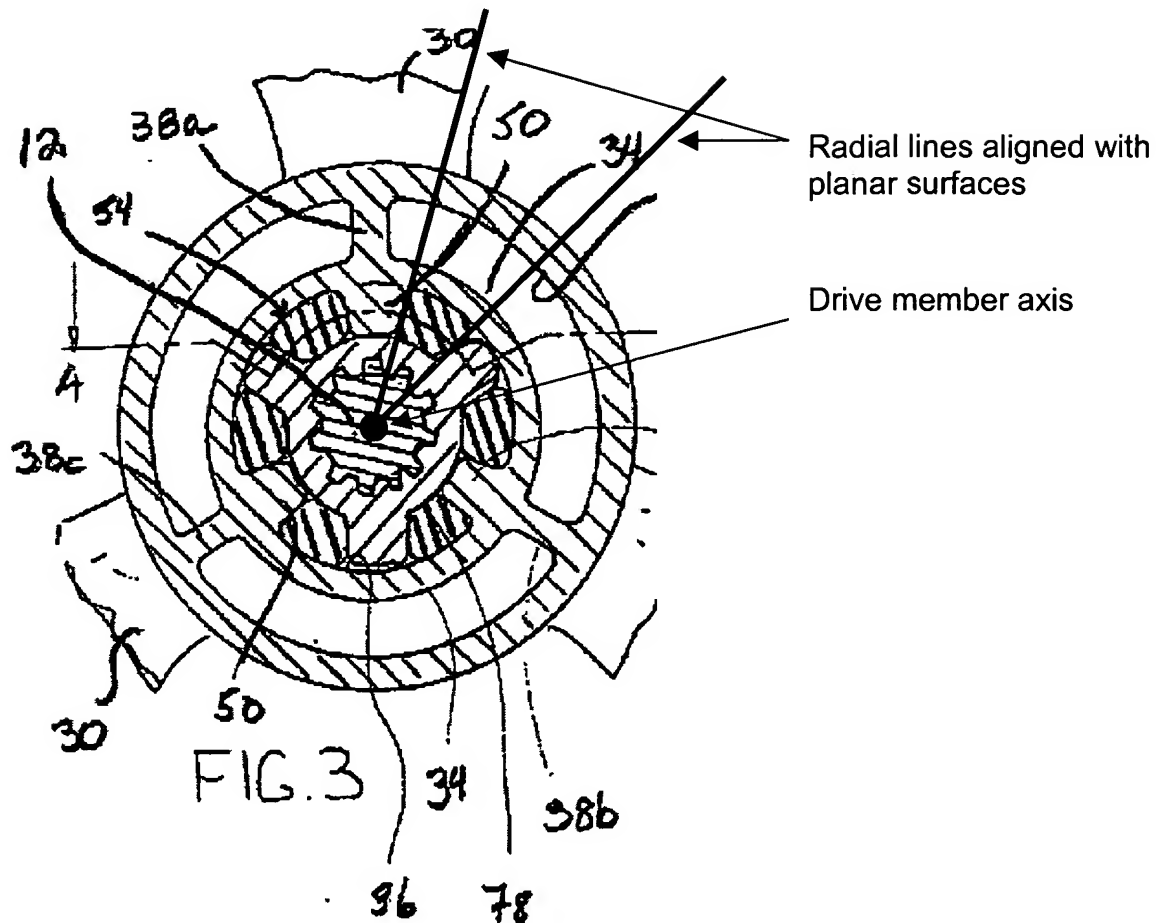
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent Application Publication US 2003/0021691 A1 (Powers hereinafter) as applied to claim 12 above, and further in view of United States Patent Application Publication US 2002/0085914 A1 (Chen hereinafter).

Powers teaches a propeller having shear rods 17-19 arranged between radially outward extending ribs 13 and radially inward extending ribs 6. The rods may have a polygonal cross-sectional shape (see paragraph 0026, the sentence bridging pages 3 and 4). The polygonal rods of Powers necessarily have planar surfaces, but said surfaces are not necessarily in radial alignment with the drive member axis.

Chen shows a resilient member 56 arranged between alternating ribs which extend radially inwards 50 and radially outwards 86. The annotated Figure 3 on the next page shows how Chen teaches planar surfaces of the resilient member in radial alignment with the drive member axis. The planar surfaces are aligned with the drive member axis for the purpose of maximizing the torque transmitted through the propeller assembly.



Since Powers discloses polygonal resilient members 17-19 arranged between ribs which extend radially inwards and radially outwards, and Chen teaches that a resilient member having a polygonal cross-section should be arranged in the propeller assembly such that the planar surfaces are in radial alignment with the drive member axis for the purpose of maximizing the torque transmitted through the propeller assembly.

Allowable Subject Matter

Claims 1-11, 16-18 and 20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-11 each require a plurality of U-shaped resilient members...having two appendages. The Chen reference (United States Patent Application Publication US 2002/0085914 A1) however, only shows one resilient member 56 having a continuous length in an annular form. There is no suggestion in Chen to modify the resilient member 56 so that there is a plurality of U-shaped members as is claimed. Such a modification to the Chen reference is deemed nonobvious by the examiner since not only would the member 56 have to be cut in at least two locations to form a single U-shaped resilient member, but also, the excess material which connects adjacent U-shaped members would have to be removed.

Claims 16-18 and 20 all require the mating of a boss end of each resilient member into a cavity formed in the drive member. None of the references on record disclose or fairly suggest the boss element claimed, therefore none of the references suggest a modification which would include the claimed boss.

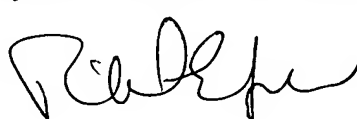
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Monday thru Friday, 8:00 am until 4:00 pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Edgar
Examiner
Art Unit 3745

RE



EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

2/11/05